

Appl. No. 09/876,411
Amdt. Dated July 2, 2006
Reply to Office Action of September 16, 2005

REMARKS

Applicants had previously modified the claims to clarify that the specified wave absorber cannot possibly be the antenna asserted by the Examiner in previously rejecting the claims. The Examiner now relies upon a test piece or structure that was used in experiment for determining the electromagnetic wave absorption characteristics of a material substrate. Applicants respectfully submit that there is simply no teaching or suggestion whatsoever in the prior art that would support the Examiner's obviousness rejection and Applicants submit that all claims remain in condition for allowance.

Applicants acknowledge that the newly cited Kotsuka, United States patent number 6,057,796 reference is directed to an electromagnetic wave absorbing material and that the disclosure of this reference indicates that the electromagnetic wave absorber that is described therein is suitable for use in cellular phones. Significantly, however, the so-called conductive plate that is being asserted in rejecting the claims is actually directed to a piece of test equipment and a test structure that is used in evaluating the electromagnetic wave absorbing characteristics of the material described in the reference. No one would ever contemplate using the test structure in combination with the subject matter described in the cellular telephone reference previously cited to arrive at a combined structure.

The asserted combination of references does not make sense as one would never incorporate a piece of electromagnetic wave absorbing test structure into a cellular telephone. More specifically, Applicants direct the Examiner to Colum 2 at lines 60-67 and following. This portion of the cited reference indicates that the device of a Figure 1 is a portion of a test

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structure for use in an experiment and that the test piece is provided with an absorbing substrate 11 which is formed in a disc configuration. As described in the specification, the absorbing substrate 11 is mounted at a terminal end of a coaxial waveguide 13. The test piece includes a rear face of the electromagnetic absorbing material being provided with a conductive plate for short-circuiting the outer and inner conductors 15 and 17 of a coaxial waveguide that provides a test signal.

The portions of the specification relied upon by the Examiner in referring to Figure 5 and the conductive plate 19 is similarly directed to the structure for shorting out the outer and inner conductors of a coaxial transmission line that was used in the test apparatus for determining return loss. See specifically Column 3 beginning at line 14. This portion of the specification notes that in the experiment, three types of absorbing substrates 11 were attached to the coaxial waveguides 13, one at a time. A TEM (transverse electromagnetic) wave was radiated onto the test piece from the left side as seen in Figure 1. On the same side, an intensity of the wave was measured and electromagnetic wave reflection return loss was calculated from the intensity. The electromagnetic wave reflection return loss was measured by an ordinary standing-wave measuring method using a measuring instrument as shown in Figure 8.

There is simply no indication whatsoever that the electromagnetic wave absorbing material described in this reference is intended to be used with a conductive plate at a time other than during a test procedure. In the test arrangement described in the specification of this reference, it is abundantly clear that the short-circuiting plate was used to provide the requisite wave reflection in order to measure return loss from the reflective structure. There

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is simply no teaching or suggestion whatsoever which would indicate to a person of ordinary skill in the art that the electromagnetic wave absorber described therein should be used in conjunction with a conductive plate.

Furthermore, the use of a conductive plate for the purposes of short-circuiting a coaxial transmission line through which a test signal is applied provides no teaching or suggestion whatsoever regarding the use of the electromagnetic wave absorbing material in a cellular telephone and providing a conductive plate on one side of the material with an electrical connection from the plate to a conductive case that surrounds the circuitry of the telephone.

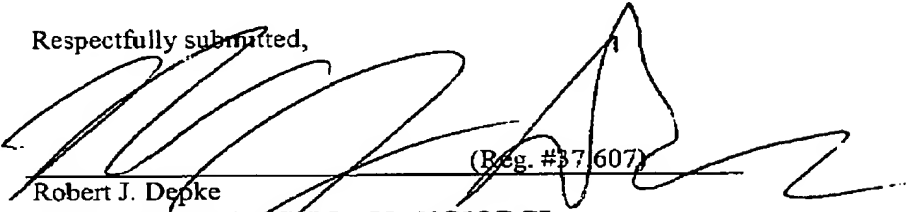
A proper prior art rejection under 35 U.S.C. § 103 requires that there be some teaching or suggestion in the prior art as a whole which would indicate to a person of ordinary skill in the art that the combination of references would be appropriate. In the present situation, the Examiner has merely identified two disparately used structures and asserted the combination renders the claimed subject matter invalid. This approach does not satisfy the required basis for properly combining references to support an obviousness rejection.

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Accordingly, in light of the foregoing, Applicants respectfully submit that all claims now stand in condition for allowance. The undersigned invites the Examiner to contact him directly should there be a need to address any minor informalities.

Respectfully submitted,

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